

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Original): A method of registering two images to be compared, comprising the steps of:

setting a number of corresponding small regions in the two images;

determining a positional relationship between each pair of the corresponding small regions in the two images;

determining a relative shift amount for registration for each pair of the corresponding small regions on the basis of the corresponding positional relationship;

binding each and every small region taken as a central region with a plurality of small regions surrounding the central region by a binding force which depends on the shift amount for the central region and the shift amount for each of the surrounding small regions;

determining a new relative shift amount for each central region in accordance with the binding force; and

relatively shifting the corresponding small regions in accordance with the new relative shift amount for each central region.

2. (Original): A method of registering two images as defined in Claim 1, wherein the corresponding positional relationship between each pair of the corresponding small regions is determined by template matching between the corresponding small regions.

3. (Original): A method of registering two images as defined in Claim 1 or 2, wherein the operation for determining the new shift amount is repeated by substituting the shift amount with the new relative shift amount.

4. (Currently Amended): A method of registering two images as defined in Claim 1, or 2 ~~or 3~~, wherein the operation for determining the new shift amount by substituting the shift amount with the new relative shift amount is repeated until the sum of the binding forces for the entire central regions drops below a predetermined value.

5. (Currently Amended): A method of registering two images as defined in one of Claims ~~1-4~~ 1 or 2, wherein the binding force is an elastic force corresponding to the difference between the shift amount for the central region and the shift amount for each of the surrounding small regions.

6. (Original): A method of registering two images as defined in Claim 5, wherein the modulus of elasticity of the elastic force is variable for each of the surrounding small regions.

7. (Currently Amended): A method of registering two images as defined in ~~one of Claims 1-6~~ Claim 1, wherein the images are temporally sequential images of the same object taken at different points in time.

8. (Currently Amended): A method of registering two images as defined in ~~one of Claims 1-7~~ Claim 1, wherein the images are radiographs for medical purposes.

9. (New): A method of registering two images as defined in Claim 3, wherein the operation for determining the new shift amount by substituting the shift amount with the new relative shift amount is repeated until the sum of the binding forces for the entire central regions drops below a predetermined value.

BEST AVAILABLE COPY

10. (New): A method of registering two images as defined in Claim 3, wherein the binding force is an elastic force corresponding to the difference between the shift amount for the central region and the shift amount for each of the surrounding small regions.

11. (New): A method of registering two images as defined in Claim 4, wherein the binding force is an elastic force corresponding to the difference between the shift amount for the central region and the shift amount for each of the surrounding small regions.